

Liusheng Duan

List of Publications by Year in descending order

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106
papers

3,642
citations

172386

29
h-index

149623

56
g-index

107
all docs

107
docs citations

107
times ranked

4070
citing authors

#	ARTICLE	IF	CITATIONS
1	Silicon effects on photosynthesis and antioxidant parameters of soybean seedlings under drought and ultraviolet-B radiation. <i>Journal of Plant Physiology</i> , 2010, 167, 1248-1252.	1.6	282
2	SOS1 gene overexpression increased salt tolerance in transgenic tobacco by maintaining a higher K ⁺ /Na ⁺ ratio. <i>Journal of Plant Physiology</i> , 2012, 169, 255-261.	1.6	170
3	Uniconazole-induced tolerance of soybean to water deficit stress in relation to changes in photosynthesis, hormones and antioxidant system. <i>Journal of Plant Physiology</i> , 2007, 164, 709-717.	1.6	142
4	Tillage practices affect biomass and grain yield through regulating root growth, root-bleeding sap and nutrients uptake in summer maize. <i>Field Crops Research</i> , 2014, 157, 89-97.	2.3	140
5	Bidirectional processing of pri-miRNAs with branched terminal loops by <i>Arabidopsis</i> Dicer-like1. <i>Nature Structural and Molecular Biology</i> , 2013, 20, 1106-1115.	3.6	133
6	Coronatine alleviates salinity stress in cotton by improving the antioxidative defense system and radical-scavenging activity. <i>Journal of Plant Physiology</i> , 2008, 165, 375-384.	1.6	126
7	Mechanism of phytohormone involvement in feedback regulation of cotton leaf senescence induced by potassium deficiency. <i>Journal of Experimental Botany</i> , 2012, 63, 5887-5901.	2.4	125
8	Brassinolide alleviated the adverse effect of water deficits on photosynthesis and the antioxidant of soybean (<i>Glycine max</i> L.). <i>Plant Growth Regulation</i> , 2008, 56, 257-264.	1.8	119
9	Physiological Evaluation of Drought Stress Tolerance and Recovery in Cauliflower (<i>Brassica</i>) Regulation, 2012, 31, 113-123.	2.8	112
10	Optimizing soaking and germination conditions to improve gamma-aminobutyric acid content in japonica and indica germinated brown rice. <i>Journal of Functional Foods</i> , 2014, 10, 283-291.	1.6	108
11	Spatiotemporal Sequestration of miR165/166 by <i>Arabidopsis</i> Argonaute10 Promotes Shoot Apical Meristem Maintenance. <i>Cell Reports</i> , 2015, 10, 1819-1827.	2.9	106
12	Genotypic variations in photosynthetic and physiological adjustment to potassium deficiency in cotton (<i>Gossypium hirsutum</i>). <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2012, 110, 1-8.	1.7	101
13	Expression of an <i>Arabidopsis</i> molybdenum cofactor sulphurase gene in soybean enhances drought tolerance and increases yield under field conditions. <i>Plant Biotechnology Journal</i> , 2013, 11, 747-758.	4.1	101
14	Overexpression of the AtLOS5 gene increased abscisic acid level and drought tolerance in transgenic cotton. <i>Journal of Experimental Botany</i> , 2012, 63, 3741-3748.	2.4	97
15	Overexpression of <i>Arabidopsis</i> Molybdenum Cofactor Sulfurase Gene Confers Drought Tolerance in Maize (<i>Zea mays</i> L.). <i>PLoS ONE</i> , 2013, 8, e52126.	1.1	95
16	Maize yield and quality in response to plant density and application of a novel plant growth regulator. <i>Field Crops Research</i> , 2014, 164, 82-89.	2.3	94
17	Regulation of cotton (<i>Gossypium hirsutum</i>) drought responses by mitogen-activated protein (MAP) kinase cascade-mediated phosphorylation of GhWRKY59. <i>New Phytologist</i> , 2017, 215, 1462-1475.	3.5	91
18	Effect of acetylation on antioxidant and cytoprotective activity of polysaccharides isolated from pumpkin (<i>Cucurbita pepo</i> , lady godiva). <i>Carbohydrate Polymers</i> , 2013, 98, 686-691.	5.1	75

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19	Increased UV-B Radiation Affects the Viability, Reactive Oxygen Species Accumulation and Antioxidant Enzyme Activities in Maize (<i>Zea mays</i> L.) Pollen. <i>Photochemistry and Photobiology</i> , 2010, 86, 110-116.	1.3	73
20	Increased abscisic acid levels in transgenic maize overexpressing <i>AtLOS5</i> mediated root ion fluxes and leaf water status under salt stress. <i>Journal of Experimental Botany</i> , 2016, 67, 1339-1355.	2.4	68
21	Differential Responses of Conventional and Bt-Transgenic Cotton to Potassium Deficiency. <i>Journal of Plant Nutrition</i> , 2007, 30, 659-670.	0.9	67
22	Cucumber (<i>Cucumis sativus</i> L.) over-expressing cold-induced transcriptome regulator ICE1 exhibits changed morphological characters and enhances chilling tolerance. <i>Scientia Horticulturae</i> , 2010, 124, 29-33.	1.7	64
23	Coronatine enhances drought tolerance via improving antioxidative capacity to maintaining higher photosynthetic performance in soybean. <i>Plant Science</i> , 2013, 210, 1-9.	1.7	54
24	NaCl salinity stress decreased <i>Bacillus thuringiensis</i> (Bt) protein content of transgenic Bt cotton (<i>Gossypium hirsutum</i> L.) seedlings. <i>Environmental and Experimental Botany</i> , 2006, 55, 315-320.	2.0	46
25	<i>Arabidopsis</i> LOS5/ABA3 overexpression in transgenic tobacco (<i>Nicotiana tabacum</i> cv. Xanthi-nc) results in enhanced drought tolerance. <i>Plant Science</i> , 2011, 181, 405-411.	1.7	37
26	Ethephon-regulated maize internode elongation associated with modulating auxin and gibberellin signal to alter cell wall biosynthesis and modification. <i>Plant Science</i> , 2020, 290, 110196.	1.7	35
27	Effects of Coronatine on Growth, Gas Exchange Traits, Chlorophyll Content, Antioxidant Enzymes and Lipid Peroxidation in Maize (<i>Zea mays</i> L.) Seedlings under Simulated Drought Stress. <i>Plant Production Science</i> , 2008, 11, 283-290.	0.9	33
28	Co-Induction of a Glutathione-S-transferase, a Glutathione Transporter and an ABC Transporter in Maize by Xenobiotics. <i>PLoS ONE</i> , 2012, 7, e40712.	1.1	33
29	Plant growth regulator and its interactions with environment and genotype affect maize optimal plant density and yield. <i>European Journal of Agronomy</i> , 2017, 91, 34-43.	1.9	31
30	Genetic Diversity of Wild Oat (<i>Avena fatua</i>) Populations from China and the United States. <i>Weed Science</i> , 2007, 55, 95-101.	0.8	29
31	Cotton shoot plays a major role in mediating senescence induced by potassium deficiency. <i>Journal of Plant Physiology</i> , 2012, 169, 327-335.	1.6	29
32	Comparative Effect of Nitrogen Forms on Nitrogen Uptake and Cotton Growth Under Salinity Stress. <i>Journal of Plant Nutrition</i> , 2015, 38, 1530-1543.	0.9	28
33	GENOTYPIC VARIATIONS IN POTASSIUM UPTAKE AND UTILIZATION IN COTTON. <i>Journal of Plant Nutrition</i> , 2010, 34, 83-97.	0.9	27
34	Resistance selection and mechanisms of oriental tobacco budworm (<i>Helicoverpa assulta</i> Guenee) to indoxacarb. <i>Pesticide Biochemistry and Physiology</i> , 2012, 103, 219-223.	1.6	27
35	Plant growth regulation enhanced potassium uptake and use efficiency in cotton. <i>Field Crops Research</i> , 2014, 163, 109-118.	2.3	27
36	Dynamic transcriptional profiling provides insights into tuberous root development in <i>Rehmannia glutinosa</i> . <i>Frontiers in Plant Science</i> , 2015, 6, 396.	1.7	27

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37	Ethephon improved drought tolerance in maize seedlings by modulating cuticular wax biosynthesis and membrane stability. <i>Journal of Plant Physiology</i> , 2017, 214, 123-133.	1.6	27
38	Coronatine Alleviates Water Deficiency Stress on Winter Wheat Seedlings. <i>Journal of Integrative Plant Biology</i> , 2010, 52, 616-625.	4.1	26
39	Coronatine-induced lateral root formation in cotton (<i>Gossypium hirsutum</i>) seedlings under potassium-sufficient and -deficient conditions in relation to auxin. <i>Journal of Plant Nutrition and Soil Science</i> , 2009, 172, 435-444.	1.1	25
40	Combining Physiological and Metabolomic Analysis to Unravel the Regulations of Coronatine Alleviating Water Stress in Tobacco (<i>Nicotiana tabacum</i> L.). <i>Biomolecules</i> , 2020, 10, 99.	1.8	25
41	Lignosulfonate Improves Photostability and Bioactivity of Abscisic Acid under Ultraviolet Radiation. <i>Journal of Agricultural and Food Chemistry</i> , 2018, 66, 6585-6593.	2.4	23
42	Nutrient Acquisition by Soybean Treated with and without Silicon under Ultraviolet-B Radiation. <i>Journal of Plant Nutrition</i> , 2009, 32, 1731-1743.	0.9	22
43	Dose-Dependent Effects of Coronatine on Cotton Seedling Growth Under Salt Stress. <i>Journal of Plant Growth Regulation</i> , 2015, 34, 651-664.	2.8	22
44	A novel ABA functional analogue B2 enhances drought tolerance in wheat. <i>Scientific Reports</i> , 2019, 9, 2887.	1.6	21
45	Application of Brassinosteroid Mimetics Improves Growth and Tolerance of Maize to Nicosulfuron Toxicity. <i>Journal of Plant Growth Regulation</i> , 2019, 38, 701-712.	2.8	21
46	Microplastics reduce the bioaccumulation and oxidative stress damage of triazole fungicides in fish. <i>Science of the Total Environment</i> , 2022, 806, 151475.	3.9	21
47	The Phytotoxin Coronatine Induces Abscission-Related Gene Expression and Boll Ripening during Defoliation of Cotton. <i>PLoS ONE</i> , 2014, 9, e97652.	1.1	19
48	Phytotoxin coronatine enhances heat tolerance via maintaining photosynthetic performance in wheat based on Electrophoresis and TOF-MS analysis. <i>Scientific Reports</i> , 2015, 5, 13870.	1.6	19
49	Saving Irrigation Water for Winter Wheat with Phosphorus Application in the North China Plain. <i>Journal of Plant Nutrition</i> , 2005, 28, 2001-2010.	0.9	18
50	Introducing selective agrochemical manipulation of gibberellin metabolism into a cereal crop. <i>Nature Plants</i> , 2020, 6, 67-72.	4.7	17
51	SILICON MITIGATES ULTRAVIOLET-B RADIATION STRESS ON SOYBEAN BY ENHANCING CHLOROPHYLL AND PHOTOSYNTHESIS AND REDUCING TRANSPIRATION. <i>Journal of Plant Nutrition</i> , 2014, 37, 837-849.	0.9	15
52	Coronatine enhances drought tolerance in winter wheat by maintaining high photosynthetic performance. <i>Journal of Plant Physiology</i> , 2018, 228, 59-65.	1.6	15
53	Ethephon Improved Stalk Strength of Maize (<i>Zea Mays</i> L.) Mainly through Altering Internode Morphological Traits to Modulate Mechanical Properties under Field Conditions. <i>Agronomy</i> , 2019, 9, 186.	1.3	15
54	Physiological and Transcriptome Profiling Analyses Reveal Important Roles of Coronatine in Improving Drought Tolerance of Tobacco. <i>Journal of Plant Growth Regulation</i> , 2020, 39, 1346-1358.	2.8	14

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55	Use of EDAH Improves Maize Morphological and Mechanical Traits Related to Lodging. <i>Agronomy Journal</i> , 2019, 111, 581-591.	0.9	13
56	Design, synthesis and mode of action of novel chloro-pyrazolyl picolinate derivatives as herbicide candidates. <i>Pest Management Science</i> , 2021, 77, 2252-2263.	1.7	13
57	Photoprotectant improves photostability and bioactivity of abscisic acid under UV radiation. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2016, 158, 99-104.	1.7	12
58	Synthesis of Gibberellic Acid Derivatives and Their Effects on Plant Growth. <i>Molecules</i> , 2017, 22, 694.	1.7	12
59	Coronatine inhibits mesocotyl elongation by promoting ethylene production in etiolated maize seedlings. <i>Plant Growth Regulation</i> , 2020, 90, 51-61.	1.8	12
60	SILICON EFFECTS ON THE PARTITIONING OF MINERAL ELEMENTS IN SOYBEAN SEEDLINGS UNDER DROUGHT AND ULTRAVIOLET-B RADIATION. <i>Journal of Plant Nutrition</i> , 2014, 37, 828-836.	0.9	11
61	System Analysis of MIRNAs in Maize Internode Elongation. <i>Biomolecules</i> , 2019, 9, 417.	1.8	11
62	Increase in root density induced by coronatine improves maize drought resistance in North China. <i>Crop Journal</i> , 2023, 11, 278-290.	2.3	11
63	Variations in Growth, Photosynthesis and Defense System Among Four Weed Species Under Increased UV-B Radiation. <i>Journal of Integrative Plant Biology</i> , 2007, 49, 621-627.	4.1	10
64	Seismic testing of high-strength steel eccentrically braced frames with a vertical link. <i>Proceedings of the Institution of Civil Engineers: Structures and Buildings</i> , 2017, 170, 874-882.	0.4	10
65	Gene Expression Profiles Deciphering the Pathways of Coronatine Alleviating Water Stress in Rice (<i>Oryza sativa</i> L.) Cultivar Nipponbare (Japonica). <i>International Journal of Molecular Sciences</i> , 2019, 20, 2543.	1.8	10
66	Gibberellin biosynthesis inhibitor mepiquat chloride enhances root K ⁺ uptake in cotton by modulating plasma membrane H ⁺ -ATPase. <i>Journal of Experimental Botany</i> , 2021, 72, 6659-6671.	2.4	10
67	Comparison of Droplet Deposition, 28-Homobrassinolide Dosage Efficacy and Working Efficiency of the Unmanned Aerial Vehicle and Knapsack Manual Sprayer in the Maize Field. <i>Agronomy</i> , 2022, 12, 385.	1.3	9
68	Construction and application of star polycation nanocarrier-based microRNA delivery system in <i>Arabidopsis</i> and maize. <i>Journal of Nanobiotechnology</i> , 2022, 20, 219.	4.2	9
69	Expression of NAC1 up-stream regulatory region and its relationship to the lateral root initiation induced by gibberellins and auxins. <i>Science in China Series C: Life Sciences</i> , 2006, 49, 429-435.	1.3	8
70	Design and synthesis of biotin-tagged photoaffinity probes of jasmonates. <i>Bioorganic and Medicinal Chemistry</i> , 2010, 18, 3012-3019.	1.4	8
71	Improved synthetic route of exo-16,17-dihydro-gibberellin A5-13-acetate and the bioactivity of its derivatives towards <i>Arabidopsis thaliana</i> . <i>Pest Management Science</i> , 2020, 76, 807-817.	1.7	8
72	Exogenous Gamma-aminobutyric Acid Coordinates Active Oxygen and Amino Acid Homeostasis to Enhance Heat Tolerance in Wheat Seedlings. <i>Journal of Plant Growth Regulation</i> , 0, , 1.	2.8	8

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73	Analysis of the genetic basis of plant height-related traits in response to ethylene by QTL mapping in maize (<i>Zea mays</i> L.). <i>PLoS ONE</i> , 2018, 13, e0193072.	1.1	8
74	Analysis of differential expression of genes induced by ethephon in elongating internodes of maize plants. <i>Frontiers of Agricultural Science and Engineering</i> , 2016, 3, 263.	0.9	8
75	Enantioselective Induction of a Glutathione-S-Transferase, a Glutathione Transporter and an ABC Transporter in Maize by Metolachlor and Its (S)-Isomer. <i>PLoS ONE</i> , 2012, 7, e48085.	1.1	7
76	The effect of phosphate buffer solutions on uniconazole complexation with hydroxypropyl- β -cyclodextrin and methyl- β -cyclodextrin. <i>Journal of Inclusion Phenomena and Macrocyclic Chemistry</i> , 2012, 73, 193-198.	1.6	7
77	A Novel Bixin Analogue for Arabidopsis and Rice with Superior Plant Growth-Promoting Activity. <i>Journal of Plant Growth Regulation</i> , 2018, 37, 166-173.	2.8	7
78	Coronatine Enhances Stalk Bending Resistance of Maize, Thickens the Cell Wall and decreases the Area of the Vascular Bundles. <i>Agronomy</i> , 2020, 10, 807.	1.3	7
79	Coronatine Modulated the Generation of Reactive Oxygen Species for Regulating the Water Loss Rate in the Detaching Maize Seedlings. <i>Agriculture (Switzerland)</i> , 2021, 11, 685.	1.4	7
80	Fulvic Acid, Brassinolide, and Uniconazole Mediated Regulation of Morphological and Physiological Traits in Maize Seedlings Under Water Stress. <i>Journal of Plant Growth Regulation</i> , 2023, 42, 1762-1774.	2.8	7
81	Quickly and efficiently remove multiple pesticides in tea infusions by low-cost carbonized bacterial cellulose. <i>Food Chemistry</i> , 2022, 375, 131899.	4.2	6
82	Spike Differentiation in Winter Wheat (<i>Triticum aestivum</i> L.) Mulched with Plastic Films During Over-Wintering Period. <i>Agroecology and Sustainable Food Systems</i> , 2008, 31, 133-144.	0.9	5
83	Enhanced UV-B Radiation Increases Glyphosate Resistance in Velvetleaf (<i>Abutilon theophrasti</i>). <i>Photochemistry and Photobiology</i> , 2012, 88, 1428-1432.	1.3	5
84	A Novel Plant Growth Regulator Alleviates High Temperature Stress in Maize. <i>Agronomy Journal</i> , 2018, 110, 2350-2359.	0.9	5
85	Design, synthesis, biological activities, and dynamic simulation study of novel thiourea derivatives with gibberellin activity towards <i>Arabidopsis thaliana</i> . <i>Bioorganic and Medicinal Chemistry</i> , 2019, 27, 114969.	1.4	5
86	Computational-Aided Discovery of Novel 1,3-Benzodioxole Plant Growth Retardants. <i>Journal of Plant Growth Regulation</i> , 2020, 39, 888-896.	2.8	5
87	Data-Independent Acquisition Proteomics Unravels the Effects of Iron Ions on Coronatine Synthesis in <i>Pseudomonas syringae</i> pv. tomato DC3000. <i>Frontiers in Microbiology</i> , 2020, 11, 1362.	1.5	5
88	Transcriptome dynamic landscape underlying the improvement of maize lodging resistance under coronatine treatment. <i>BMC Plant Biology</i> , 2021, 21, 202.	1.6	5
89	Coronatine alleviates cold stress by improving growth and modulating antioxidative defense system in rice (<i>Oryza sativa</i> L.) seedlings. <i>Plant Growth Regulation</i> , 2022, 96, 283-291.	1.8	5
90	SKI-INTERACTING PROTEIN interacts with SHOOT MERISTEMLESS to regulate shoot apical meristem formation. <i>Plant Physiology</i> , 2022, 189, 2193-2209.	2.3	5

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91	The fate of Cry1Ac Bt toxin during oyster mushroom (<i>Pleurotus ostreatus</i>) cultivation on transgenic Bt cottonseed hulls. <i>Journal of the Science of Food and Agriculture</i> , 2008, 88, 214-217.	1.7	4
92	Synthesis and plant growth regulation activity of β -D-ManpNAc-(1 \rightarrow 2)-[β -L-Rhap-(1 \rightarrow 3)]- β -L-Rhap-(1 \rightarrow 4)- β -D-GlupNAc-(1 \rightarrow 3)- β -L-Rhap, the repeating unit of O-antigen of <i>Rhizobium trifolii</i> 4s. <i>Carbohydrate Research</i> , 2014, 388, 87-93.	1.7	4
93	An ABA Functional Analogue B2 Enhanced Salt Tolerance by Inducing the Root Elongation and Reducing Peroxidation Damage in Maize Seedlings. <i>International Journal of Molecular Sciences</i> , 2021, 22, 12986.	1.8	4
94	Coronatine effects on yield, nutrient uptake, and physio-biochemical attributes of soybean roots. <i>Journal of Plant Nutrition</i> , 2018, 41, 664-671.	0.9	3
95	Design, synthesis and biological activities of novel urea derivatives with superior plant growth-inhibiting activity. <i>Plant Growth Regulation</i> , 2021, 93, 243-252.	1.8	3
96	Dissection of the molecular genetic architecture of the ratio of ear to plant heights in response to ethylene by a RIL population with SNPs marker in maize. <i>Acta Physiologiae Plantarum</i> , 2017, 39, 1.	1.0	2
97	Design, Synthesis and Gibberellin-Like Activity of Novel 1-Substituted 3-[3-(Trifluoromethyl)phenyl]thiourea Derivatives. <i>Journal of Plant Growth Regulation</i> , 2022, 41, 1845-1853.	2.8	2
98	Self-assembly of 1-triacontanol onto layered doubled hydroxide nano-carriers toward sustainable growth regulation of maize. <i>Environmental Science: Nano</i> , 2022, 9, 797-804.	2.2	2
99	Better Droplet Deposition and Internode Shortening Effects of Plant Growth Regulator EDAA on Maize Applied by Small Unmanned Aerial Vehicle Than Electric Knapsack Sprayer. <i>Agriculture (Switzerland)</i> , 2022, 12, 404.	1.4	2
100	Design, Synthesis, and Action Mechanism of 1,3-Benzodioxole Derivatives as Potent Auxin Receptor Agonists and Root Growth Promoters. <i>Frontiers in Plant Science</i> , 0, 13, .	1.7	2
101	Evaluation of the Potential of Diquat (1,1'-Ethylene-2,2'-bipyridyl) to Assist Maize Mechanical Harvesting As a Desiccant. <i>ACS Agricultural Science and Technology</i> , 0, , .	1.0	1
102	Synthesis and Fluorescent Properties of Aminopyridines and the Application in "Click and Probing" Molecules, 2022, 27, 1596.	1.7	1
103	Effect of GA3 and S3307 on Content of Taxol and Its' Precursors of <i>Taxus cuspidate</i> In Vitro. , 2009, , .		0
104	Effects of <i>dapA</i> gene deletion on coronatine biosynthesis in <i>Pseudomonas syringae</i> pv. <i>glycinea</i> PG4180. <i>World Journal of Microbiology and Biotechnology</i> , 2011, 27, 325-331.	1.7	0
105	Biomass yield and quality of the <i>Miscanthus</i> – <i>giganteus</i> in northern China. <i>Agronomy Journal</i> , 2022, 114, 1091-1099.	0.9	0
106	Synthesis of Highly Substituted Aminopyridines with Vinyl Azides, Isonitriles, and Ketones. <i>Chemistry - an Asian Journal</i> , 2022, , .	1.7	0